

Quick start guide

CY7113 EZ-PD™ PMG1-S3 MCU prototyping kit

The CY7113 EZ-PD™ PMG1-S3 MCU prototyping kit is a development platform to design products which can be powered from a high-voltage USB PD port, and also need a microcontroller with CAPSENSE™ capability to implement different applications. This platform supports the USB PD 3.1 protocol up to 140 W (28 V, 5 A) of power consumption. It also supports two self-capacitance-based CAPSENSE™ buttons and one 5-segment slider.





Before you start

- Ensure that you have a USB PD 3.1-capable USB-C power adapter (e.g., Apple 140 W USB-C power adapter) with a compatible USB PD 3.1-capable Type-C cable.
- > Ensure that the jumper shunt on the power selection jumper (J5) is placed at position 1-2 to select the USB-C power adapter as the power source.

Step 1: Hardware connection

- Connect the USB PD sink port (J10) of the CY7113 board to the USB-C power adapter using the USB Type-C cable.
- > Confirm that the power LED (LED4) glows green and the user LED (LED3) blinks green. Now, the kit is ready for use.

Step 2: Evaluating the USB PD sink functionality

- Measure the DC OUT voltage by connecting a multimeter to the terminal block (J9). Confirm that the DC_OUT voltage value is within the 4.75 V-29.4 V range. The actual value is determined by the maximum voltage which the USB-C power adapter can supply.
- > Optional: Disconnect power, remove the multimeter and connect an external load to the terminal block (J9). Re-connect power to the kit and verify that the load is powered.



The maximum current that can be consumed by an external load cannot exceed 5 A.

Step 3: Evaluating the CAPSENSE[™] functionality

- > Touch a CAPSENSE[™] button (BTN1/BTN2) by placing a finger on the circular button area. The feedback LED associated with the button (LED5/LED6) glows green until the finger is lifted.
- Slide the finger on the 5-segment slider (SLD1-SLD5). The feedback LED associated with each slider segment (LED7–LED11) glows green during the finger contact period.

Next steps

- Download and unzip the CY7113 release package from the CY7113 web page (www.cypress.com/CY7113).
- > See the CY7113 kit user guide (available as part of the CY7113 kit release package) to learn more about the kit features and how to develop applications using ModusToolbox[™] software.

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CY7113 kit contents



Powering the CY7113 board



USB PD sink setup



Evaluating CAPSENSE[™] features

Additional information

Additional information For further information on technologies, our products, the application of our products, delivery terms and conditions and/or prices, please contact your nearest Infineon Technologies office (www.infineon.com).

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